

- b. Check the brake linings for wear and replace as necessary.
- c. Check for a loose or shorted brake warning light sensor or wire, and replace or repair as necessary.

Oil Pressure Warning Light

- a. Stop the engine immediately. Check the engine oil level and oil filter condition, and top off or change the oil as necessary.
- b. Check the oil pressure sensor wire for being shorted to ground. Disconnect the wire from the oil pressure sensor and with the ignition in the ON position, but not running, the oil pressure light should not be working. If the light works with the wire disconnected, check the sensor wire for being shorted to ground. Check the wire routing to make sure the wire is not pinched and check for insulation damage. Repair or replace the wire as necessary and recheck before starting the engine.
- c. Remove the oil pan and check for a clogged oil pick-up tube screen.
- d. Check the oil pressure sensor operation by substituting a known good sensor.
- e. Check the oil filter for internal restrictions or leaks, and replace as necessary.

WARNING: If the engine is operated with oil pressure below the manufacturer's specification, severe (and costly) engine damage could occur. Low oil pressure can be caused by excessive internal wear or damage to the engine bearings, oil pressure relief valve, oil pump or oil pump drive mechanism.

Before starting the engine, check for possible causes of rapid oil loss, such as leaking oil lines or a loose, damaged, restricted, or leaking oil filter or oil pressure sensor. If the engine oil level and condition are acceptable, measure the engine's oil pressure using a pressure gauge, or determine the cause for the oil pressure warning light to function when the engine is running, before operating the engine for an extended period of time. Another symptom of operating an engine with low oil pressure is the presence of severe knocking and tapping noises.

Parking Brake Warning Light

- a. Check the brake release mechanism and verify the parking brake has been fully released.
- b. Check the parking brake light switch for looseness or misalignment.
- c. Check for a damaged switch or a loose or shorted brake light switch wire, and replace or repair as necessary.

2. Warning light(s) flickers on and off when driving

Ignition, Battery or Alternator Warning Light

- a. Check the alternator output and voltage regulator operation. An intermittent condition may indicate worn brushes, an internal short, or a defective voltage regulator. Replace the alternator or failed component.
- b. Check the warning light wiring for a shorted, pinched or damaged wire and repair as necessary.

Check Engine Light

- a. Check the engine for required maintenance and tune-up status. Verify engine tune-up specifications, as well as spark plug, air filter and engine oil condition; replace and/or adjust items as necessary.
- b. Check the fuel tank for low fuel level causing an intermittent lean fuel mixture. Top off fuel tank and reset check engine light.
- c. Check for an intermittent failure or partially disconnected engine fuel and ignition component, sensor or control unit; repair or replace as necessary.
- d. Check the intake manifold and vacuum hoses for air leaks, and repair as necessary.
- e. Check the warning light wiring for a shorted, pinched or damaged wire and repair as necessary.

Anti-Lock Braking System (ABS) Light

- a. Check the wheel sensors and sensor rings for debris, and clean as necessary.
- b. Check the brake master cylinder for fluid leakage or seal failure and replace as necessary.
- c. Check the ABS control unit, pump and proportioning valves for proper operation, and replace as necessary.
- d. Check the sensor wiring at the wheel sensors and the ABS control unit for a loose or shorted wire and repair as necessary.

Brake Warning Light

- a. Check the brake fluid level and check for possible leakage from the hydraulic lines and seals. Top off brake fluid and repair leakage as necessary.
- b. Check the brake linings for wear and replace as necessary.
- c. Check for a loose or shorted brake warning light sensor or wire, and replace or repair as necessary.

Oil Pressure Warning Light

- a. Stop the engine immediately. Check the engine oil level and check for a sudden and rapid oil loss, such as a leaking oil line or oil pressure sensor, and repair or replace as necessary.
- b. Check the oil pressure sensor operation by substituting a known good sensor.
- c. Check the oil pressure sensor wire for being shorted to ground. Disconnect the wire from the oil pressure sensor and with the ignition in the ON position, but not running, the oil pressure light should not be working. If the light works with the wire disconnected, check the sensor wire for being shorted to ground. Check the wire routing to make sure the wire is not pinched and check for insulation damage. Repair or replace the wire as necessary and recheck before starting the engine.
- d. Remove the oil pan and check for a clogged oil pick-up tube screen.

Parking Brake Warning Light

- a. Check the brake release mechanism and verify the parking brake has been fully released.
- b. Check the parking brake light switch for looseness or misalignment.
- c. Check for a damaged switch or a loose or shorted brake light switch wire, and replace or repair as necessary.